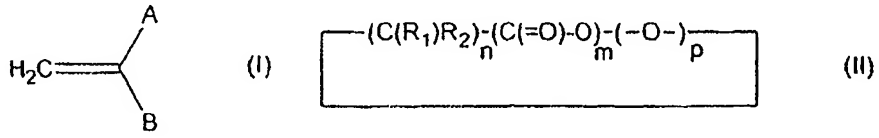
Amendments to the Claims:

1. (Previously Presented) A method for encapsulating biocompatible polymers, said method comprising using a solid support comprising at least one electrically conducting and/or semiconducting region containing a reducible oxide on its surface, characterized in that at least one zone of said surface is functionalized with an electrografted organic film obtained from electroactive organic precursors each comprising at least one functional group of interest, and in that the number of functional groups of interest accessible for the formation of a covalent, ionic or hydrogen bond with a complementary group within said film represents at least 90% of the total number of functional organic groups of interest, and in that the density of the accessible functional groups of interest is between $10^4/\mu m^2$ and $10^{10}/\mu m^2$, and said method comprising attaching molecules of interest or objects bearing a complementary function to said solid support.

2. (Previously Presented) The method as claimed in claim 1, characterized in that the organic precursors are chosen from:

- polymerizable and electrograftable monomers bearing at least one organic functional group of interest;
- polymerizable and electrograftable monomers bearing at least one functional group making it possible to obtain, by derivatization, the desired reactive functional organic group of interest;
- molecules, macromolecules and objects functionalized with monomers bearing at least one organic functional group of interest or with monomers bearing at least one functional group making it possible to obtain, by derivatization, the desired reactive functional organic group of interest.

3. (Previously Presented) The method as claimed in claim 2, characterized in that the polymerizable monomers are chosen from activated vinyl monomers and molecules that are cleavable by nucleophilic attack, corresponding respectively to formulae (I) and (II) below:



in which:

- A, B, R_1 and R_2, which may be identical or different, represent a hydrogen atom, a C_1-C_4 alkyl radical, a nitrile radical or an organic function chosen from the following functions: hydroxyl, amine: $-NH_x$ with x = 1 or 3, thiol, carboxylic acid, ester, amide: $-C(=O)NH_y$ in which y = 1 or 2, imide, imidoester, aromatic, acid halide: -C(=O)X in which X represents a halogen atom chosen from fluorine, chlorine or bromine, acid anhydride: -C(=O)OC(=O), nitrile, succinimide, phthalimide, isocyanate, epoxide, siloxane: $-Si(OH)_z$ in which z is an integer between 1 and 3 inclusive, benzoquinone, carbonyldiimidazole, para-toluenesulfonyl, para-nitrophenyl chloroformate, ethylene and vinyl, or an organic group (or spacer arm) bearing at least one of the functions listed above; it being understood that at least one of A and B and that at least one of R_1 and R_2 represents one of said organic functions or an organic group bearing at least one of said functions;
- n, m and p, which may be identical or different, are integers between 0 and 20 inclusive.

4. (Previously Presented) The method as claimed in claim 3, characterized in that the activated vinyl monomers of formula (I) are chosen from methacryloyl succinimide, hydroxyethyl methacrylate, methacrylonitrile, acrylonitrile, glycidyl acrylate and glycidyl methacrylate, acrylic acid, methacrylic acid, aminopropylmethacrylamide, aminohexylmethacrylamide, methacryloyl succinimide, acryloyl succinimide, methyl methacrylate, ethyl methacrylate, propyl methacrylate, butyl methacrylate, methyl cyanomethacrylate, methyl cyanoacrylate, 2- and 4-vinylpyridine and 4-chlorostyrene.

5. (Previously Presented) The method as claimed in claim 3, characterized in that the molecules that are cleavable by nucleophilic attack, of formula (II), are chosen from ethylene oxide, substituted ethylene oxides, butyrolactone, caprolactones and in particular ε-caprolactone.

6. (Previously Presented) The method as claimed in claim 2, characterized in that the molecules, macromolecules and objects functionalized with monomers are chosen from oligonucleotides, nucleic acid molecules, oligopeptides, polypeptides, proteins, oligosaccharides, polymers, fullerens, functionalized carbon nanotubes, and cells; said molecules, macromolecules and said objects being derivatized, totally or partially, with monomers corresponding to formulae (I) or (II).

7. (Previously Presented) The method as claimed in claim 1, characterized in that the electrically conducting or semiconducting surface is a stainless steel, steel, iron, copper, nickel, cobalt, niobium, aluminum, silver, titanium, silicon, titanium nitride, tungsten nitride or tantalum nitride surface, or a noble metal surface chosen from gold, platinum, iridium or platinum-iridium alloy surfaces.

8 – 21 (Cancelled)

22. (Previously Presented) The method as claimed in claim 1, characterized in that the electrografted organic film is obtained from electroactive organic precursors each comprising at least one functional group of interest, in a mixture with electroactive organic precursors not

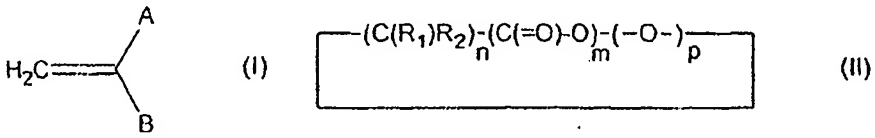
comprising a functional group of interest.

23. (New) A solid support comprising at least one electrically conducting and/or semiconducting region containing a reducible oxide on its surface, characterized in that at least one zone of said surface is functionalized with an electrografted organic film obtained from electroactive organic precursors each comprising at least one functional group of interest, and in that the number of functional groups of interest accessible for the formation of a covalent, ionic or hydrogen bond with a complementary group within said film represents at least 90% of the total number of functional organic groups of interest, and in that the density of the accessible functional groups of interest is between $10^4/\mu m^2$ and $10^{10}/\mu m^2$.

24. (New) The support as claimed in claim 23, characterized in that the organic precursors are chosen from:

- polymerizable and electrograftable monomers bearing at least one organic functional group of interest;
- polymerizable and electrograftable monomers bearing at least one functional group making it possible to obtain, by derivatization, the desired reactive functional organic group of interest;
- molecules, macromolecules and objects functionalized with monomers bearing at least one organic functional group of interest or with monomers bearing at least one functional group making it possible to obtain, by derivatization, the desired reactive functional organic group of interest.

25. (New) The support as claimed in claim 24, characterized in that the polymerizable monomers are chosen from activated vinyl monomers and molecules that are cleavable by nucleophilic attack, corresponding respectively to formulae (I) and (II) below:



in which:

- A, B, R_1 and R_2, which may be identical or different, represent a hydrogen atom, a C_1-C_4 alkyl radical, a nitrile radical or an organic function chosen from the following functions: hydroxyl, amine: $-NH_x$ with x = 1 or 3, thiol, carboxylic acid, ester, amide: $-C(=O)NH_y$ in which y = 1 or 2, imide, imidoester, aromatic, acid halide: -C(=O)X in which X represents a halogen atom chosen from fluorine, chlorine or bromine, acid anhydride: -C(=O)OC(=O), nitrile, succinimide, phthalimide, isocyanate, epoxide, siloxane: $-Si(OH)_z$ in which z is an integer between 1 and 3 inclusive, benzoquinone, carbonyldiimidazole, para-toluenesulfonyl, para-nitrophenyl chloroformate, ethylene and vinyl, or an organic group (or spacer arm) bearing at least one of the functions listed above; it being understood that at least one of A and B and that at least one of R_1 and R_2 represents one of said organic functions or an organic group bearing at least one of said functions;
- n, m and p, which may be identical or different, are integers between 0 and 20 inclusive.

26. (New) The support as claimed in claim 25, characterized in that the activated vinyl monomers of formula (I) are chosen from methacryloyl succinimide, hydroxyethyl methacrylate, methacrylonitrile, acrylonitrile, glycidyl acrylate and glycidyl methacrylate, acrylic acid, methacrylic acid, aminopropylmethacrylamide, aminohexylmethacrylamide, methacryloyl succinimide, acryloyl succinimide, methyl methacrylate, ethyl methacrylate, propyl methacrylate, butyl methacrylate, methyl cyanomethacrylate, methyl cyanoacrylate, 2- and 4-vinylpyridine and 4-chlorostyrene.

27. (New) The support as claimed in claim 25, characterized in that the molecules that are cleavable by nucleophilic attack, of formula (II), are chosen from ethylene oxide, substituted ethylene oxides, butyrolactone, caprolactones and in particular ε-caprolactone.

28. (New) The support as claimed in claim 24, characterized in that the molecules, macromolecules and objects functionalized with monomers are chosen from oligonucleotides, nucleic acid molecules, oligopeptides, polypeptides, proteins, oligosaccharides, polymers, fullerens, functionalized carbon nanotubes, and cells; said molecules, macromolecules and said objects being derivatized, totally or partially, with monomers corresponding to formulae (I) or (II).

29. (New) The support as claimed in claim 23, characterized in that the electrically conducting or semiconducting surface is a stainless steel, steel, iron, copper, nickel, cobalt, niobium, aluminum, silver, titanium, silicon, titanium nitride, tungsten nitride or tantalum nitride surface, or a noble metal surface chosen from gold, platinum, iridium or platinum-iridium alloy surfaces.

30. (New) The support as claimed in claim 23, characterized in that the electrografted organic film is obtained from electroactive organic precursors each comprising at least one functional group of interest, in a mixture with electroactive organic precursors not comprising a functional group of interest.